

IN THE CLAIMS:

115. (Currently amended) In a method of transmitting [[a]]message from a sender to a destination address through a server displaced from the destination address and of authenticating the message, the steps at the server of:

receiving the message from the sender,
transmitting the message to the destination address,
receiving at the server an indication from the destination address that the message has been received at the destination address from the server,
maintaining the message ~~in its original form~~ and additionally providing a verification of the message, and
transmitting to the sender the message ~~in its original form~~, and the verification of the message, for storage by the sender.

116. (Previously amended) In a method as set forth in claim 115, the step at the server of:

discarding the message and the verification of the message after the transmission of the message and the verification of the message to the sender and before any authentication of the message.

117. (Currently amended) In a method as set forth in claim 116, the steps at the server of:

receiving from the sender a copy of the message and the verification of the message before any authentication of the message, but after the transmission of the message to the sender,

generating digital fingerprints of the message, and the verification ~~digital~~
~~signature~~ of the message, received from the sender,

comparing the digital fingerprints, and

authenticating the message on the basis of the results of the comparison.

118. (Currently amended) In a method as set forth in claim 116, the steps at the server of:

providing at the server an attachment including the identity of the sender and the identity and address of the server and the identity and the destination address of a recipient,

maintaining the attachment and additionally providing a verification of the attachment and

~~transmitting to the sender the attachment, and the verification of the attachment, for storage by the sender,~~

transmitting to the sender the attachment and the verification ~~digital~~ signature of the attachment, at the same time as the transmission of the message, and the verification of the message, to the sender.

119. (Currently amended) In a method as set forth in claim 115, the steps at the server of:

receiving an attachment from the destination address,

maintaining the attachment ~~in its original form~~ and additionally providing a verification of the attachment and

transmitting to the sender the attachment[[,]] and the verification of the attachment ~~in the original form of the attachment~~, for storage by the sender.

120. (Currently amended) In a method as set forth in claim [[9]] 119, the steps at the server of:

receiving from the sender copies of the message and the attachment and the verification digital signatures of the message and the attachment,

generating digital fingerprints of the message and the verification of the message and digital fingerprints of the attachment and the verification ~~digital signature~~ of the attachment, and

comparing the digital fingerprints of the message and of the verification of the message, and comparing the digital fingerprints of the attachment and the verification of the attachment, to authenticate the message and the attachment.

121. (Currently amended) In a method as set forth in claim 119, the steps at the server of:

receiving the message₁ and the verification of the message₁ at the server from the sender, and

authenticating the message at the server on the basis of the message, and the verification ~~digital signature~~ of the message, received by the server from the sender.

145-229 (Cancelled)

230. (Currently amended) In a method of authenticating a message provided by a sender and transmitted to a destination server by a second server displaced from the sender and the destination server, the steps at the second server of:

providing an electronic attachment including the identity and address of the sender and the identity and address of the second server and the identity and address of the destination server, and

transmitting the electronic attachment from the second server to the sender after the transmission of the message from the second server to the destination server ~~but~~ but before any authentication of the message by the second server.

231. (Currently amended) In a method as set forth in claim 230 wherein the electronic attachment transmitted from the second server to the sender includes the address and identity of intermediate stations receiving the electronic attachment in the transmission of the electronic attachment ~~between~~ from the second server ~~and to~~ to the destination server.

232. (Currently amended) In a method as set forth in claim 230, the steps at the second server of:

~~maintaining the electronic attachment in its original state, and additionally~~ providing a verification of the electronic attachment at the second server and

transmitting the verification of the attachment from the second server to the sender, at the time of transmitting the attachment from the second server to the sender.

233. (Currently amended) In a method as set forth in claim 231, the steps at the second server of:

~~maintaining the electronic attachment and additionally~~ providing a digital signature of the attachment[[,]] at the second server and

transmitting the digital signature of the electronic attachment from the second server to the sender at the time of transmitting the electronic attachment from the second server to the sender.

234. (Currently amended) In a method as set forth in claim 232, the steps at the second server of:

receiving the electronic attachment, and the verification of the electronic attachment at the second server from the sender, and

authenticating the electronic attachment at the second server on the basis of the electronic attachment, and the verification ~~digital signature~~ of the electronic attachment, received by the second server from the sender.

235. (Previously amended) In a method as set forth in claim 233, the step at the second server of:

authenticating the electronic attachment at the second server on the basis of the electronic attachment and the digital signature of the electronic attachment, received by the second server from the sender.

236. (Currently amended) In a method as set forth in claim 232, the steps at the second server of:

receiving at the second server the attachment, and the verification ~~digital signature~~ of the attachment from the sender,

providing at the second server digital fingerprints of the attachment, and the verification of the attachment, received at the second server from the sender, and comparing the digital fingerprints at the second server to authenticate the attachment.

237. (Previously amended) In a method as set forth in claim 233, the steps at the second server of:

receiving the attachment, and the digital signature of the attachment, at the second server from the sender,

providing at the second server digital fingerprints of the attachment, and of the digital signature of the attachment, received at the second server from the sender, and comparing the digital fingerprints to authenticate the attachment.

238-242 (Cancelled)

243. (Previously presented) In a method as set forth in claim 116, including the steps at the server of

receiving from the sender a copy of the message and the digital signature of the message after the transmission of the message to the destination address but before any authentication of the message, and

processing the message and the digital signature of the message to determine the authentication of the message.

244. (Currently amended) In a method as set forth in claim 115, the steps of

in the course of transmitting the message from the server to the destination address, providing an exchange of data between the server and the destination address relating to the message,

recording at the server at least a portion of the data exchanged between the server and the destination address relating to the message, and

transmitting the recorded data to a storage means for subsequent production as proof of delivery of the message to the destination address.

245. (Previously presented) In a method as set forth in claim 244 wherein the data exchanged between the server and the destination address may be via a selected one of SMTP and ESMTP protocols.

246. (Previously presented) In a method as set forth in claim 244 wherein the exchange of data between the server and the destination address includes the identification of the server and the destination address and the identification of the message and an acknowledgement of the receipt of the message by the destination address.

247. (Currently amended) In a method as set forth in claim 245 wherein the data ~~exchanges~~ exchanged between the server and the destination address ~~are~~ is used to establish that the message has been received at the destination address.

248. (Currently amended) In a method as set forth in claim 247, wherein the authentication is provided as follows:

generating at the server a digital fingerprint of the message ~~from the~~
~~message~~ received by the server from the sender, and a digital fingerprint of the digital
signature of the message received at the server, and comparing the digital fingerprints
generated at the server, and

providing an electronic attachment transmitted between the second server
and the destination server via a selected one of SMTP and ESMTP protocols, and

providing a dialog between the ~~second~~ server and the destination ~~server~~
address relating to the message during the transmission of the message ~~between~~ from the
~~second~~ server ~~and to~~ the destination server ~~and closes the dialog~~ so as to establish
subsequently that the destination server has received the message.

transmitting the electronic attachment from the second server to the sender.

249. (Currently amended) In a method as set forth in claim 230, the steps of
providing a dialog between the second server and the destination server
during the transmission of the message ~~between~~ from the second server ~~and to~~ the
destination server, through stages between the second server and the destination server, to
establish subsequently that the destination server has received the message, and

storing at least a portion of the dialog between the second server and the
destination server for subsequent proof of delivery of the message by the second server to
the destination server.

250. (Currently amended) In a method as set forth in claim 248 wherein

the dialog between the second server and the destination server includes matter relating to the identities of the second server and the destination server and relating to the message.

251. (Previously presented) In a method as set forth in claim 249 wherein the dialog between the second server and the destination server is included in the electronic attachment.

252. (Previously presented) In a method as set forth in claim 250 wherein the dialog between the second server and the destination server includes an acknowledgement by the destination server that it has received the message.

253. (Previously presented) In a method as set forth in claim 231, the steps of: providing a dialog between the second server and the destination server during the transmission of the message between the second server and the destination server through stages between the second server and the destination server, and storing at least a portion of the dialog between the second server and the destination server for subsequent proof of delivery of the message by the second server to the destination server.

254. (Currently amended) In a method as set forth in claim 234 including the steps of providing a dialog between the second server and the destination server relating to the message during the transmission of the message between the second server and the destination server, the dialog being provided via a selected one of SMTP and ESMTP protcols,

storing at least a portion of the dialog between the second server and the destination server for subsequent proof of the delivery of the message by the second server to the destination server, wherein

the dialog between the second server and the destination server includes matter relating to the identities of the second server and the destination server and relating to the message and wherein

the dialog between the second server and the destination server is included in the electronic attachment.